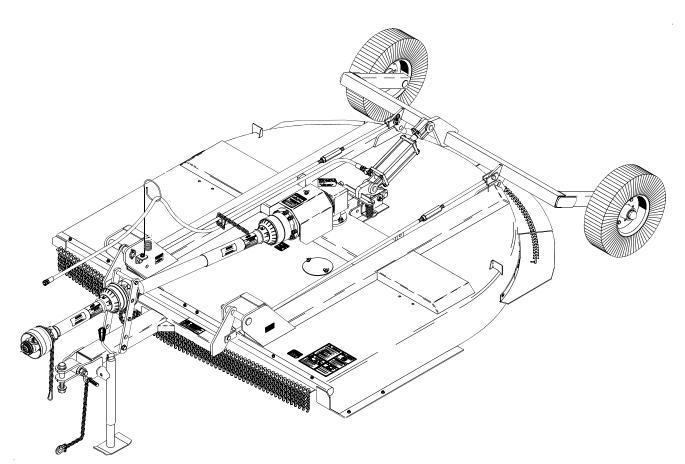
# **Operator's Manual**

RCR2584 Rotary Cutter



14397

Cover photo may show optional equipment not supplied with standard unit.



Read the Operator's manual entirely. When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

7/14/08

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RCR2584 Rotary Cutter	312-459M

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Important Safety Information

### **Be Aware of Signal Words**

The word that designates a degree or level of hazard seriousness. The signal words are:

### 

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

#### **WARNING**

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

### 

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.



### Keep Riders Off Machinery

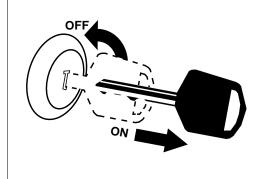
- ▲ Riders obstruct the operator's view they could be struck by foreign objects or thrown from the machine.
- ▲ Never allow children to operate equipment.



### **For Your Protection**

▲ Thoroughly read and understand the "Safety Label" section, read all instructions noted on them.



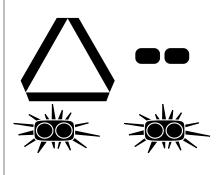


### Shutdown and Storage

- ▲ Lower machine to ground, put tractor in park, turn off engine, and remove the key.
- ▲ Detach and store implements in a area where children normally do not play. Secure implement by using blocks and supports.

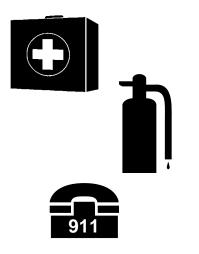
### Use Safety Lights and Devices

- ▲ Slow moving tractors, self-propelled equipment, and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.
- ▲ Flashing warning lights and turn signals are recommended whenever driving on public roads. Use lights and devices provided with implement.



### **Prepare for Emergencies**

- ▲ Be prepared if a fire starts.
- ▲ Keep a first aid kit and fire extinguisher handy.
- ▲ Keep emergency numbers for doctor, ambulance, hospital and fire department near phone.



### Wear Protective Equipment

- Protective clothing and equipment should be worn.
- ▲ Wear clothing and equipment appropriate for the job. Avoid loose fitting clothing.
- ▲ Prolonged exposure to loud noise can cause hearing impairment or hearing loss. Wear suitable hearing protection such as earmuffs or earplugs.
- ▲ Operating equipment safely requires the full attention of the operator. Avoid wearing radio headphones while operating machinery.



### **Practice Safe Maintenance**

- ▲ Understand procedure before doing work. Use proper tools and equipment, refer to Operator's Manual for additional information.
- ▲ Work in a clean dry area.
- ▲ Lower the implement to the ground, put tractor in park, turn off engine, and remove key before preforming maintenance.
- ▲ Do not grease or oil implement while it is in operation.
- ▲ Inspect all parts. Make sure parts are in good condition & installed properly.
- Remove buildup of grease, oil or debris.
- ▲ Remove all tools and unused pars from implement before operation.



### Safety at All Times

Thoroughly read and understand the instructions given in this manual before operation. Refer to the "Safety Label" section, read all instructions noted on them.

- ▲ Operator should be familiar with all functions of the unit.
- ▲ Operate implement from the driver's seat only.
- ▲ Do not leave tractor or implement unattended with engine running.

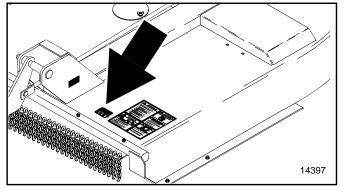
- ▲ Dismounting from a moving tractor could cause serious injury or death.
- ▲ Do not stand between the tractor and implement during hitching.
- ▲ Keep hands, feet, and clothing away from power-driven parts.
- ▲ Wear snug fitting clothing to avoid entanglement with moving parts.
- ▲ Watch out for wires, trees, etc., when folding and raising implement. Make sure all persons are clear of working area.



## Safety Labels

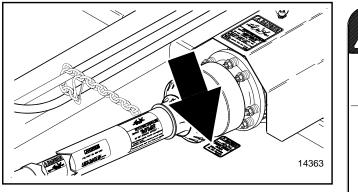
Your implement comes equipped with all safety labels in place. They were designed to help you safely operate your implement. Read and follow their directions.

- 1. Keep all safety labels clean and legible.
- 2. Replace all damaged or missing labels. To order new labels go to your Land Pride Dealer.
- 3. Some new equipment installed during repair require safety labels to be affixed to the replaced component as specified by the manufacturer. When ordering new components make sure the correct safety labels are included in the request. To order new labels go to your Land Pride dealer.
- 4. Refer to this section for proper label placement. To install new labels:
- 5. To install new labels:
  - a. Clean the area on which the label is to be placed.
  - b. Peel backing from label. Press firmly on surface, being careful not to cause air bubbles under label.









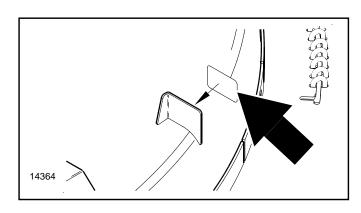


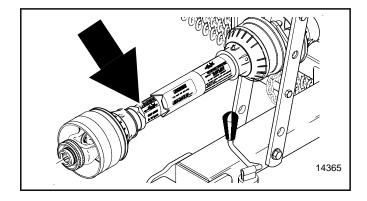
818-187C Danger PTO Shield

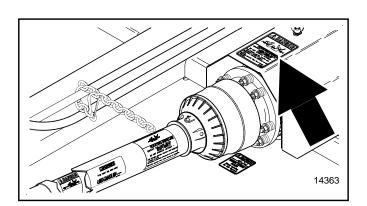
#### Land Pride

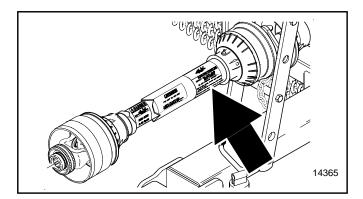
### **Table of Contents**

### Important Safety Information











**818-540C** Danger Guard Missing

818-230C

**Red Reflector** 

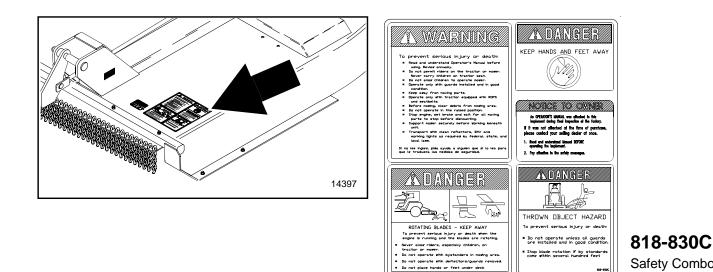


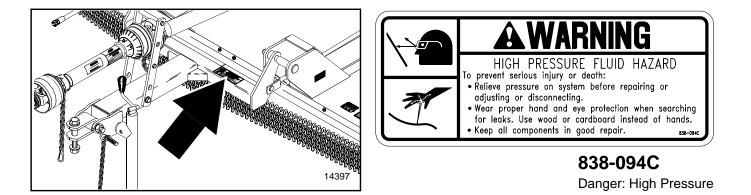
818-552C Danger PTO Driveline



818-552C Danger PTO Driveline

Safety Combo





Land Pride welcomes you to the growing family of new product owners.

This implement has been designed with care and built by skilled workers using quality materials. Proper assembly, maintenance, and safe operating practices will help you get years of satisfactory use from the machine.

The parts on your RCR2584 Rotary Cutter have been specially designed and should only be replaced with genuine Land Pride parts. Therefore, should your Rotary Cutter require replacement parts go to your Land Pride Dealer.

### **Using This Manual**

This Operator's Section is designed to help familiarize you with safety, assembly, operation, adjustments, trouble-shooting, and maintenance. Read this manual and follow the recommendations to help ensure safe and efficient operation.

The warranty Registration card should be filled out by the dealer at the time of purchase.

To order a new Operator or Parts Manual contact your authorized dealer. You may obtain parts information from our website at www.landpride.com.

The information contained within this manual was current at the time of printing. Some parts may change slightly to assure you of the best performance.

### Terminology

"Right " or "Left" as used in this manual is determined by facing the direction the machine will travel while in use unless otherwise stated.

### Definitions

IMPORTANT: A special point of information related to its preceding topic. The author's intention is that this information should be read and noted before continuing.

NOTE: A special point of information that the author feels an operator must be aware of before continuing.

### **Owner Assistance**

If customer service or repair parts are required contact an Land Pride dealer. A dealer has trained personnel, repair parts and equipment needed to service the implement.

These parts have been specially designed and should only be replaced with genuine Land Pride parts.

### Serial Number Plate

Refer to the Figure 1 for the location of the serial number plate.

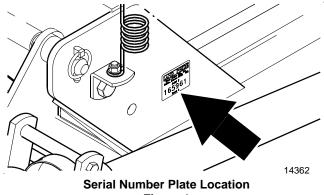


Figure 1

For prompt service always use the serial number and model number when ordering parts from a Land Pride dealer. Be sure to include serial and model numbers in all correspondence.

Dealers want you to be satisfied with the new machine. If for any reason an operator does not understand any part of this manual or is not satisfied with the service received, the following actions are suggested:

- 1. Discuss the matter with the dealership service manager and make sure they are aware of any problems and that he has had the opportunity to assist.
- 2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the problem and request assistance.
- 3. For further assistance write to:

### **Product Support**

Land Pride, Service Department 1525 East North Street P.O. Box 5060 Salina, Ks. 67402-5060

## **Tractor Requirements**

The RCR2584 Rotary Cutter is designed for use with tractors that are equipped with a (540 RPM 1 3/8"-6 spline) rear power take-off (PTO).

The tractor must also provide for 3-point hitch attachment Category II or III. The tractors rated drawbar minimum horsepower on a 3 point to be 60 hp., and on a trail type 40 hp.

NOTE: In order to maintain steering control, ballast may need to be added to your tractor. To determine whether or not to add the ballast, refer to your tractor's operator manual.

### Lift-Type Cutter 3-Point Hitch Assembly

NOTE: Do not tighten hardware until assembly is complete. Refer to **"Torque Values Chart for Common Bolt Sizes"** on page 27.

### Refer to Figure 1-1:

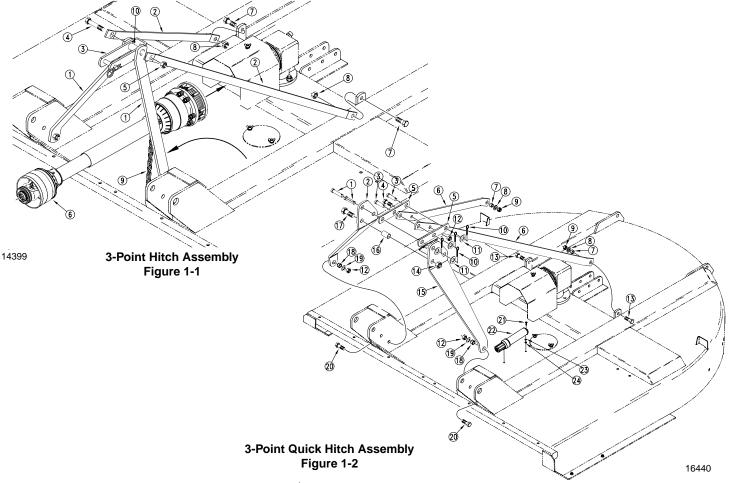
- Assemble hitch braces (#2) to the rear strap lugs (welded to cutter deck) using 5/8" x 1 1/2" bolts (#7), and 5/8" lock nuts (#8).
- 2. Rotate hitch straps (#1) and hitch braces (#2) up to a vertical position. Install bushing (#10) and pivoting hitch (#3) to the inside of hitch straps (#1), with hitch braces (#2) on the outside. Install 1" x 6" long bolt (#4) and lock nut (#5).

### **3-Point Quick Hitch Assembly**

Assemble as shown in Figure 1-2.

### **Driveline Installation**

- 1. Remove wing nut holding gearbox shield and flip up and out of the way.
- 2. Attach the slip clutch end of the driveline (#6) to the gearbox input shaft securely. Make certain that the slip clutch is fully onto the input shaft splines. Tighten the two lock nuts on back side of slip clutch alternately until they have reached the proper torque.
- 3. Secure chain (#9) on driveline to hitch brace (#2) to restrict outer shield from rotating.
- 4. Swing gearbox shield back into place and re-install the wing nut and tighten.



### Section 1 Assembly and Setup

### Single Tailwheel Assembly

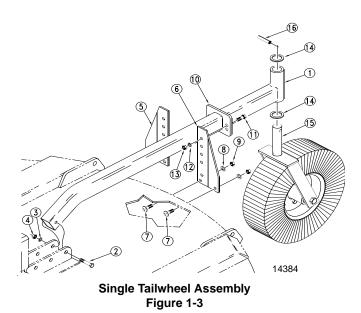
NOTE: Do not tighten hardware until assembly is complete. Refer to **"Torque Values Chart for Common Bolt Sizes"** on page 27.

#### Refer to Figure 1-3:

- 1. Slide tailwheel arm adjustment plate (#10) onto tailwheel arm weldment (#1) as shown.
- Attach tailwheel tube (#1) to deck using a 5/8" -11 x 3" long bolt (#2), 5/8" lock washer (#3), and 5/8" nut (#4).

NOTE: Install in hole shown if chainguards are installed, otherwise move components to hole closest to gearbox.

- Assemble tailwheel mounting bracket (#5), and (#6) to deck with four 1/2" -13 x 1 1/2" long carriage bolts (#7), 1/2" flat washers (#8), and 1/2" lock nuts (#9).
- 4. Install shim washer (#14) onto yoke assembly (#15) then insert into tailwheel weldment (#1). Slide shim washer (#14) onto yoke assembly shaft and secure with roll pin (#16).
- Assemble tailwheel adjusting bracket (#10), to mounting brackets (#5), and (#6) with two 1/2" -13 x 1 1/2" long bolts (#11), 1/2" lock washers (#12), and 1/2" nuts (#13). Refer to "Cutting Height Adjustment" on page 17.



### **Dual Tailwheel Assembly**

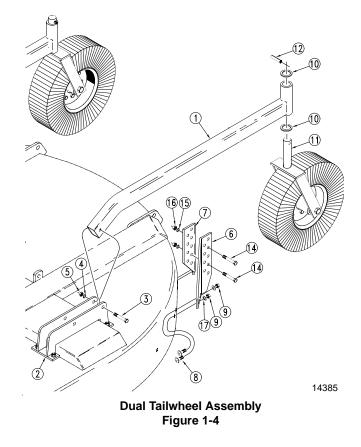
NOTE: Do not tighten hardware until assembly is complete. Refer to **"Torque Values Chart for Common Bolt Sizes"** on page 27.

#### Refer to Figure 1-4:

 Attach tailwheel weldment (#1) to tailwheel bracket weldment (#2) with a 5/8" -11 x 3" long bolt (#3), 5/8" lock washer (#4), and 5/8" nut (#5).

NOTE: Install in hole shown if chainguards are installed, otherwise move components to hole closest to gearbox.

- Assemble tailwheel adjusting bracket (#6), and (#7) to the deck using four 1/2" -13 x 1 1/2" long carriage bolts (#8), and 1/2" lock nuts (#9) and 1/2" flat washers (#17).
- 3. Install shim washer (#10) onto yoke assembly (#11) then insert into tailwheel weldment (#1). Slide shim washer (#10) onto yoke assembly shaft and secure with roll pin (#12).
- Install two 1/2" -13 x 3 1/2" long bolts (#14), lock washers (#15), and nuts (#16), in adjusting mounts (#6 & #7). Refer to "Cutting Height Adjustment" on page 18. Repeat for opposite side.



### Trail-Type Cutter Hitch Assembly

NOTE: Do not tighten hardware until assembly is complete. Refer to **"Torque Values Chart for Common Bolt Sizes"** on page 27.

#### Refer to Figure 1-5:

- 1. Assemble tongue weldment (#1) to deck weldment using two hitch pins (#2), spacer tubes (#3) and lynch pins (#4).
- 2. Attach the bearing support assembly (#5) to the tongue (#1) with two bushings (#6), flat washers (#7), lock washers (#8), nut (#9) and bolt (#10).
- 3. Attach level rod assembly (#11) to the tongue weldment (#1) using two clevis pins (#12), flat washers (#13) and hair pin cotters (#14). Make sure that the adjusting nut on the level rod assemblies is threaded the same distance on both level rod weldment long and level rod weldment short. This will ensure a level unit.
- 4. Mount hose holder bracket (#17) to the deck with the 3/4" -10 x 1 1/2" long bolt (#18) and lock nut (#19).
- 5. Fasten hose holder (#20) to the hose holder bracket (#17) with a 3/8" -16 x 1 1/2" long bolt (#21), flat washer (#22) and lock nut (#23).

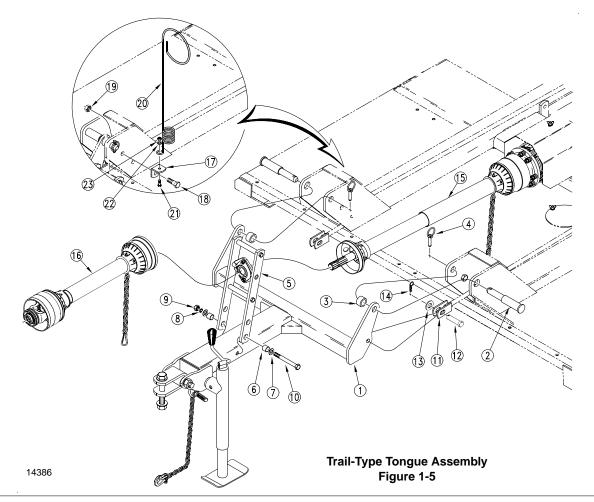
### **Driveline Installation**

- 1. Remove wing nut holding gearbox shield and flip up and out of the way.
- 2. Attach the slip clutch end of the jackshaft to the gearbox input shaft securely. Make certain that the slip clutch is fully onto the input shaft splines. Tighten the two lock nuts on back side of slip clutch alternately until they have reached the proper torque.
- 3. Swing gearbox shield back into place and re-install the wing nut and tighten.
- 4. Insert jackshaft (#15) through bearing support assembly (#5).

NOTE: Be sure lock collar is to the rear.

Install main driveline to jackshaft by attaching (red) slide collar to jackshaft. Twist the quick disconnect on the yoke and push it forward to engage the groove on the splined stub on the jackshaft.

5. Secure chain on driveline (#16) to bearing support assembly (#5) to restrict outer shield from rotating. Secure chain on driveline (#15) to level rod weldment to restrict outer shield from rotating.



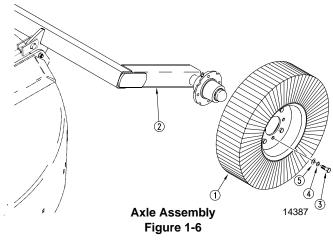
### Section 1 Assembly and Setup

### **Axle Assembly**

NOTE: Do not tighten hardware until assembly is complete. Refer to **"Torque Values Chart for Common Bolt Sizes"** on page 27.

### Refer to Figure 1-6:

- 1. Install tire (#1) to axle weldment (#2), using four bolts (#3), lock washers (#4) and flat washers (#5).
- 2. Repeat for opposite side.



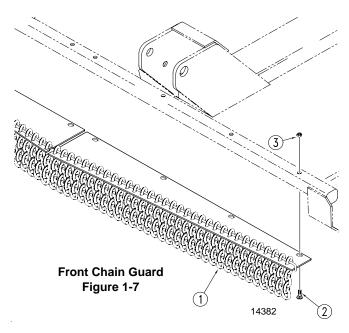
## 

Rotary cutters have the ability to discharge objects at high speeds; therefore, the use of front and rear safety shields is strongly recommended when cutting along highways or in an area where people may be present.

## Safety Guards

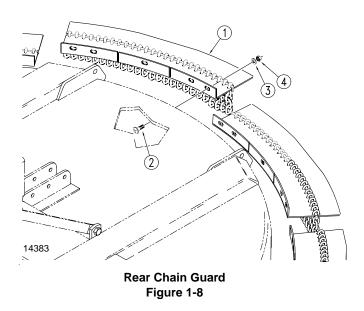
### **Front Chain Guard**

Install each segment of the front chain guards (#1) as shown in Figure 1-7, with  $1/2" -13 \times 2 3/4"$  long carriage bolts (#2), lock nuts (#3). Tighten all nuts and bolts to torque as indicated in the "**Torque Values Chart for Common Bolt Sizes**" on page 27.



## **Rear Chain Guard**

Install each segment of the rear chain guards (#1) as shown in Figure 1-8, using with 1/2" -13 x 1 1/2" long carriage bolts (#2), 1/2" flat washers (#3) and 1/2" lock nuts (#4)."**Torque Values Chart for Common Bolt Sizes**" on page 27.



## Tractor Hook-Up 3-Point Tractor Hook-Up

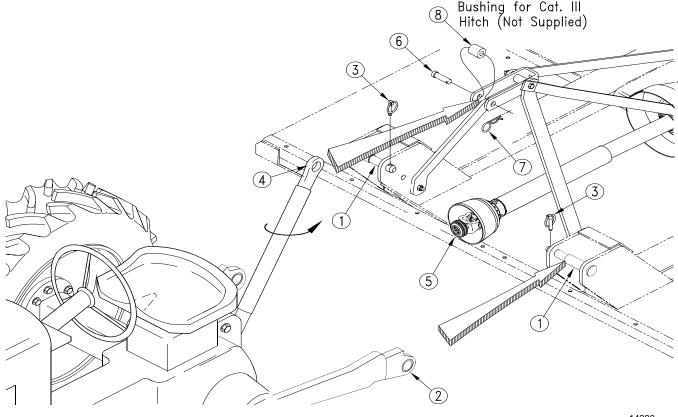
## Refer to Figure 1-9:

- 1. Locate the cutter on a flat level surface.
- 2. Determine the hitch category of the tractor that will be used:
  - a. A Category II tractor will have a lower hitch link hole diameter of 1 1/8".
  - b. A Category III tractor will have a lower hitch link hole diameter of 1 7/16".
- 3. Remove hitch pins (#1) from deck weldment. Position tractor lower lift arms (#2) and re-insert hitch pins (#1) and secure with lynch pin (#3).
- 4. Connect the top link (#4) to the upper pivot hitch using 1" pin supplied for Category II. A 1 1/4" spacer (not supplied) will be required for Category III.
- 5. Attach slide collar (#5) to tractor PTO. Twist the quick disconnect on the yoke and push it forward to engage the groove on the splined output shaft.

- 6. Start the tractor and slowly engage the tractors hydraulic 3-point to lift the cutter. Check for sufficient drawbar clearance. Move the drawbar ahead, aside or remove if required. Watch the telescoping movement of the driveline to ensure that it does not bottom out while lifting the 3-point. If the driveline does bottom out, it will require shortening:
  - a. Pull driveline apart, and install each half to the designated position.
  - b. With the implement in the shortest working condition to the tractor, hold the half shafts next to each other and mark them.
  - c. Shorten the inner and outer profiles by the same length as the guard tubes.
  - d. Round off all sharp edges and remove burrs. Grease the sliding profiles before re-assembly.

## 

*Engage parking brake, shut off tractor and remove key before dismounting from the tractor.* 

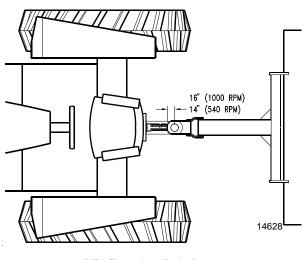


3-Point Tractor Hook-Up Figure 1-9 14380

## Trail-Type Tractor Hook-Up

### Refer to Figure 1-11:

1. In hooking up the cutter, maintain proper distance between the drawbar hitch point and the end of the tractors PTO shaft. This distance is 14" for 540 RPM.



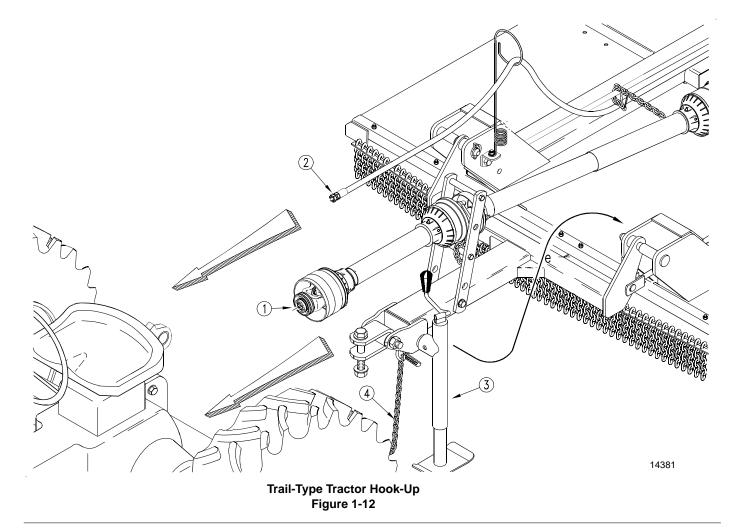
PTO/Drawbar Relation Figure 1-11

2. Locate the cutter on a flat level surface. Back the tractor to the cutter and secure the cutter to the tractor drawbar with a 1" -8 x 4 1/2" long bolt, lock washer and nut provided. Use washers supplied if needed as shims to secure tongue clevis to drawbar. (May need to adjust turnbuckle to obtain correct drawbar height.)

IMPORTANT: Parking jack use: Whenever using parking jack (#3) install lock pin through jack and tube bracket welded to tongue. Use jack to raise and lower tongue to connect to the tractor drawbar. When tongue is connected to tractor drawbar retract jack fully, remove pin and store jack as shown in Figure 1-12. When using jack to support cutter while being disconnected leave cutter in transport position. Attach jack to tongue mounting tube using lock pin and rotate handle to raise.

NOTE: Always place jack foot on firm surface or place board under jack for support.

3. Attach (black) slide collar (#1) to tractor PTO. Twist the quick disconnect on the yoke and push it forward to engage the groove on the splined output shaft. Attach hydraulic hose (#2) to tractor hydraulic system.



### **Safety Chains**

### Refer to Figure 1-12:

When towing implements on the highway, use a safety chain with tensile strength equal to or greater than the gross weight of the implement to be towed by the tractor. This will control the implement in the event the hitch pin is lost. After attaching the safety chain (#4), make a trial run by driving the tractor to the right and to the left for a short distance to check the safety chain adjustment. If necessary, re-adjust to eliminate a tight or loose chain. See (ASAE S338.2) for proper connection between tractor and implement.

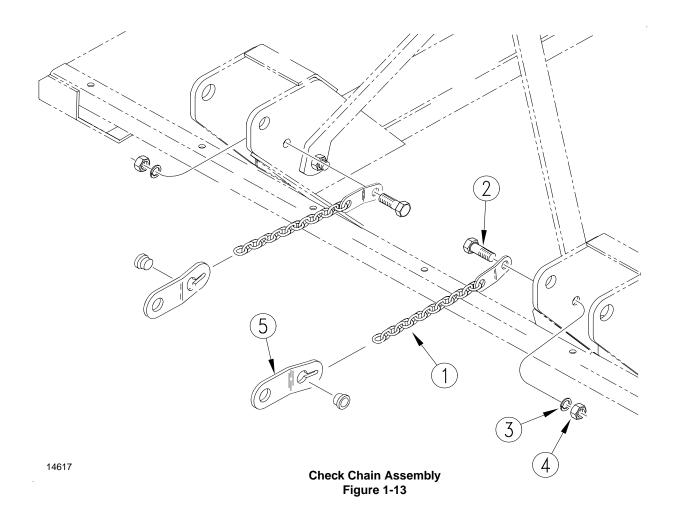
### **Check Chains**

Check chains are used to control cutting height and allow mower to be lowered to the same preset cutting height ef-

fortlessly. Install lower end of check chain (#1) to inner hitch ear as shown in Figure 1-13, using bolts (#2), lock washers (#3) and nuts (#4). Tighten securely. Install chain lugs (#5) on either side of the tractor top link mount using pin (not supplied)

(1" Dia. pin for Category II and 1 1/4" for Category III). Cutting height is then set by placing proper chain link in key slot (#5).

NOTE: For additional safety in transport, raise cutter as high as possible, and shorten check chains to prevent inadvertent falling in transport.



## Section 2 Operating Instructions

## Transporting

When traveling on public roads at night or during the day, use accessory lights and devices for adequate warning to operator's of other vehicles. Comply with all federal, state and local laws.

**IMPORTANT:** Always disengage the tractor's PTO before raising the cutter to transport position.

- 1. When raising the cutter to the transport position be sure that driveline does not contact tractor or cutter.
- 2. Be sure to reduce tractor ground speed when turning; and, leave enough clearance so the cutter does not contact obstacles such as buildings, trees or fences.
- 3. Limit transport speed to 20 mph. Transport only with a farm tractor of sufficient size and horse power. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
- 4. When traveling over rough or hilly terrain, shift tractor to a lower gear.

## **Operating Check List**

In addition to design and configuration of equipment; hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training involved in the operation, transport, maintenance and storage of equipment. Before beginning to cut, the following inspection should be performed.

Operating Checklist						
	Check	Reference				
	<b>"Important Safety Information"</b> in this Manual.	Page 1				
	Check oil level in gearboxes.	Section 5 Page 22				
	Check that all plugs in gearbox have been replaced properly.	Section 5 Page 22				
	Be sure nuts and bolts are tight.	Section 1				
	Be certain all guards and shields are in place.	Section 1 Page 11				
	Lubricate the cutter as needed. Refer to "Maintenance and Lubrication".	Section 5 Page 22				

## 

To prevent personal injury caused by thrown objects, the use of front & rear safety guards is strongly recommended! To avoid injury or death from entanglement in rotating drivelines, the drive gearbox shields must be in place and secure when operating.

## 

Rotary cutters have the ability to discharge objects at high speeds; therefore, the use of front & rear safety shields is strongly recommended when cutting along highways or in an area where people may be present.

## **Cutting Instructions**

- 1. Your cutter is equipped with free swinging cutting blades to reduce shock loads to the cutter if striking obstacles.
- Start the machine slowly; do not use full throttle. Allow 10 seconds for cutter blades to become aligned properly before going to full power.
- 3. The ground speed depends on two things: the density of the material being cut, and the size of the tractor. Never run fast enough to overload the tractor.
- 4. It is important to maintain 540 RPM PTO speed. Loss of PTO speed will allow the blades to hinge back and result in ragged, uneven cutting.
- 5. This cutter was designed to cut grass and medium brush in right-of-ways, pastures and for shredding row crop residues.

## 

Damage may occur if exceeding the rated cutting capacity of the cutter!

## 

Do not over speed PTO or machine damage may result. This cutter is designed to be used only with a tractor having a 540 RPM rear PTO.

## **Leveling Procedure**

There are 4 primary adjustments that should be made prior to actual field operations:

- a. Deck level from left to right
- b. Tractor top link length
- c. Tractor lower link height
- d. Tailwheel height

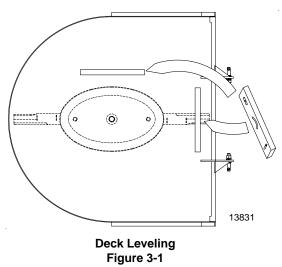
Proper adjustment of each of these items will provide for higher efficiency, improved cutting performance and longer blade life. The following tools will be needed:

- a. Pliable tape measure
- b. Spirit or carpenters level
- c. Open end or hex end wrench or socket set
- d. Protective gloves

Having completed, the **"Tractor Hookup"**, locate the tractor on a flat, level surface.

### Lift-Type Cutter

- 1. Use the tractors hydraulic 3-point control to lower the cutter until the tailwheel contacts ground surface.
- 2. Place a spirit level or other suitable leveling device on the front of the cutter deck as shown in Figure 3-1. Adjust either one or both of the tractors lower link height adjustments to level the deck from left to right. Some tractors have only a single adjusting crank.



- 3. Similarly, place a level on either of the main deck channels. Use the tractors 3-point hydraulic control to level the cutter deck from front to rear.
- 4. Adjust the length of the tractors top link such that the pivoting upper hitch is aligned vertically with the lower hitch pins. See Figure 3-2.

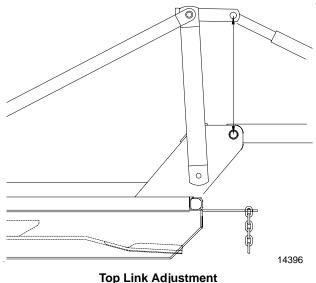


Figure 3-2

## DANGER!

Engage parking brake, disengage PTO, shut off tractor and remove key before proceeding. Ensure that all moving parts have come to a complete stop before dismounting from the tractor.

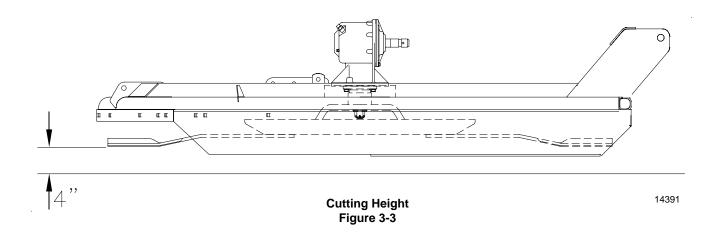
## 

Wear a pair of gloves when performing this operation. Go to the back of the cutter and carefully rotate each blade to the position shown in Figure 3-1. Avoid direct contact with the cutting edge of the blade.

### **Nominal Cutting Height**

Measure the distance from the end (cutting tip) of the blade to the ground surface. This distance is the nominal cutting height. Refer to Figure Figure 3-3.

### Section 3 Adjustments

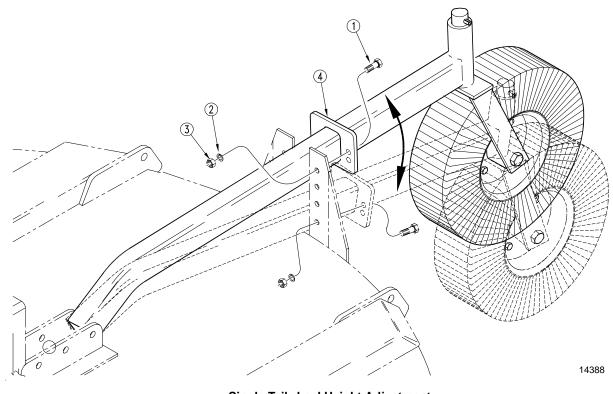


## **Cutter Height Adjustment**

### **Single Tailwheel**

#### Refer to Figure 3-4:

- 1. If the cutting height is too high or too low, the tailwheel must be adjusted as follows:
  - a. Use the tractors 3-point hydraulic control to lift the cutter such that the tailwheel clears the ground.
- b. Remove attaching hardware; 1/2" -13 x 1 1/2"long bolt (#1), 1/2" lock washer (#2) and 1/2" nut (#3).
- Adjust the tailwheel up or down to the desired cutting height by repositioning the adjusting plate (#4) and replace the attaching hardware.



Single Tailwheel Height Adjustment Figure 3-4

### **Dual Tailwheel**

#### Refer to Figure 3-5:

- 1. If the cutting height is too high or too low, the tailwheel must be adjusted as follows:
  - a. Use the tractors 3-point hydraulic control to lift the

cutter such that the tailwheel clears the ground surface.

- Remove attaching hardware; 1/2" -13 x 3 1/2" long bolt (#1), 1/2" lock washer (#2) and 1/2" nut (#3).
- c. Adjust the tailwheel up or down to the desired cutting height and replace the attaching hardware.

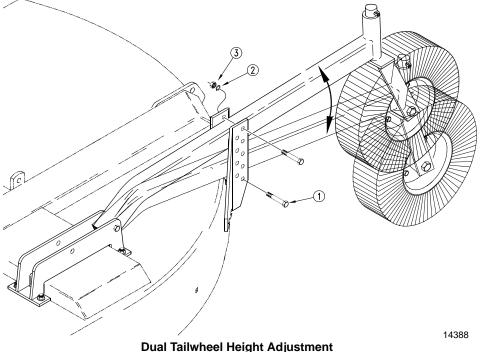
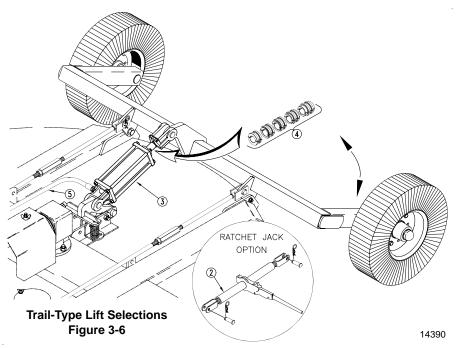


Figure 3-5

### **Trail-Type Lift Selections**

The trail-type unit can be equipped with a ratchet jack (#1), or hydraulic cylinder (#2). The hydraulic selection includes stroke control spacers (#3) to set cutting height. Stroke control spacers (#3) consist of cast steel halves and a

spring clip. To install or remove, simply raise or lower implement with tractor hydraulics and pull stroke control valves apart. Store stroke control spacers on hydraulic hose (#4) near hydraulic cylinder. Refer to Figure 3-6.



## Deck Attitude Adjustment

### Refer to Figure 3-7:

This adjustment is very important. With the deck positioned at this attitude, the blades will be cutting material only at the front of the cutter. If the deck is level, or the rear of the cutter is lower than the front, the blades are subject to continuous material flow which results in additional blade wear and horsepower loss as well as more frequent blade sharpening.

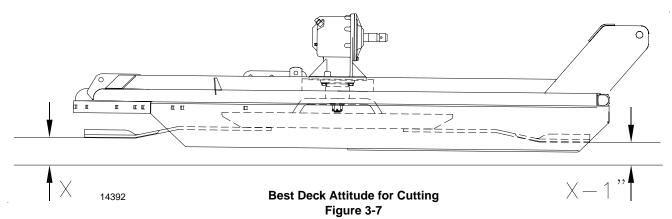
### Lift-Type

- 1. Place tractor and mower on level surface.
- 2. Raise the mower to approximate desired cutting height with tractor hydraulic lever.
- 3. Loosen and remove bolts on adjusting brackets and position tailwheel.

- 4. Lower the cutter slowly until mower is 1" lower at front than at rear. Set stop on tractor lift quadrant so the cutter can be returned to same height.
- 5. Adjust top link. Refer to Figure 3-2.

### **Trail-Type**

- 1. Place tractor and mower on level surface.
- 2. Retract ratchet jack or hydraulic cylinder to raise rear wheels off of ground.
- 3. Remove clevis pins from level rod assembly and axle.
- 4. Unscrew (only) short level rod weldment from level rod assembly approximately 1/4", and reassemble to axle weldment.



## Maintenance

Proper servicing and adjustment is the key to the long life of any farm implement. With careful and systematic inspection, you can avoid costly maintenance, time and repair.

After using your Rotary Cutter for several hours, check all bolts to be sure they are tight.

Replace any worn, damaged or illegible safety labels by obtaining new labels from your Land Pride Dealer.

## Service Cutting Blades

1. Both blades should be sharpened at the same angle as the original cutting edge and must be replaced or reground at the same time to maintain proper balance in the cutting unit.

NOTE: Care should be taken in order not to remove any more material than necessary when sharpening blades.

- 2. Both blades should weigh the same after sharpening.
- When replacing or sharpening the cutter blades, examine bolts for excessive wear and replace if necessary. To replace blades:
  - a. Order blade bolt Land Pride part # 802-277C.
  - b. Torque blade bolt lock nut to 450 ft. pounds. An extended cheater bar may be required to achieve proper torque.

IMPORTANT: Replace blades with genuine Land Pride blades only. Blades must be ordered and replaced in pairs.

If replacing dishpan, nut on gearbox output shaft should be torqued to 450 foot/pounds and cotter pin installed in nut with legs securely bent around nut.

## **Driveline Clutch**

Cutter drive components are protected from shock loads by a four plate slip clutch. The clutch must be capable of slippage during operation to protect the gearbox, driveline and other drivetrain parts.

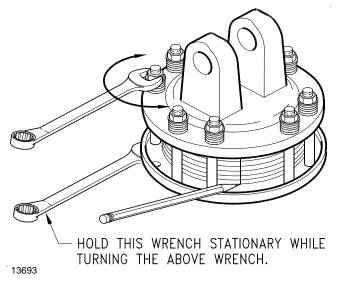
Prior to initial operation and after long periods of inactivity, the clutch should be "run-in" to remove any oxidation that may have accumulated on the friction surfaces.

*Engage parking brake, disengage PTO, shut off tractor, and remove key before making any of the following adjustments.* 

## **Clutch Run-In**

### Refer to Figure 5-1:

1. Using a pencil or other marker, scribe a line across the exposed edges of the clutch plates and friction disks.



Clutch Figure 5-1

- Carefully loosen each of the 8 spring retainer nuts on the clutch housing a total of EXACTLY 2 revolutions. It will be necessary to hold the hex end of the retainer bolt in order to count the exact number of revolutions.
- Start the tractor and engage the PTO drive for 2-3 seconds to permit slippage of the clutch surfaces. Disengage the PTO, then re-engage a second time for 2-3 seconds. Disengage the PTO, shut off tractor and remove key. Wait for all components to stop before dismounting from tractor.
- 4. Inspect the clutch and ensure that the scribed markings made on the clutch plates have changed position. If any two marks on a friction disk and plate are still aligned, such indicates that slippage has not occurred and the clutch must be disassembled to separate the friction disks, see "Clutch Assembly and Disassembly", on page 21.
- 5. Tighten each of the 8 spring retainer nuts on the clutch housing EXACTLY 2 revolutions to restore the original clutch setting pressure.
- The clutch should be checked during the first hour of cutting and periodically each week. An additional set of scribe marks can be added to check for slippage. See "Clutch Assembly and Disassembly", on page 21, to adjust for proper spring length.

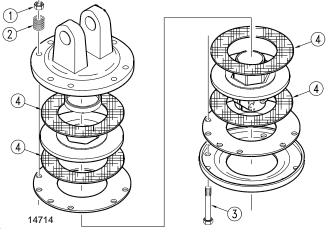
## Section 4 Maintenance and Lubrication

## **Clutch Assembly and Disassembly**

If the clutch run-in procedure, see "**Clutch Run-In**" on page 20, indicated that one or more of the friction disks did not slip, the clutch must be disassembled to separate the friction discs. Refer to the Parts Section of this manual for a detailed parts breakdown.

### Refer to Figure 5-2:

Disassembly of the clutch is simply a matter of first removing the spring retainer nuts (#1), springs (#2) and bolts (#3) from the assembly. Each friction disc (#4) must then be separated from the metal surface adjacent to it. Inspect all parts for excessive wear and condition. Clean all parts that do not require replacement.

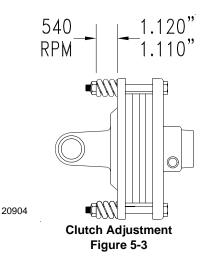


Clutch Disassembly Figure 5-2

The original friction disc thickness is 1/8" (3.2mm) and should be replaced if the thickness falls below 3/64" (1.1mm). If the clutches have been slipped to the point of "smoking", the friction discs may be damaged and should be replaced. Heat build-up may also affect the yoke joints.

### Refer to Figure 5-3:

Install new friction discs if needed and reassemble all components in proper order. Progressively tighten each spring retainer bolt until the spring length is 1.010" to 1.120" for 540 RPM.



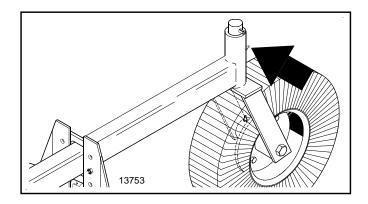
## Storage

At the end of the working season or when the cutter will not be used for a long period, it is good practice to clean off any dirt or grease that may have accumulated on the cutter and any of the moving parts.

- 1. Clean the Rotary Cutter as necessary.
- 2. Check the blades for wear and replace if necessary, see "**Service Cutting Blades**", Page 20.
- 3. Inspect the cutter for loose, damaged or worn parts and adjust or replace as needed.
- 4. Lubricate as noted in "Lubrication", below.
- 5. Store the Rotary Cutter inside if possible for longer Rotary Cutter life.
- 6. Repaint parts where paint is worn or scratched to prevent rust. Ask your dealer for Aerosol Land Pride Beige touch-up paint #821-011C.

## Lubrication

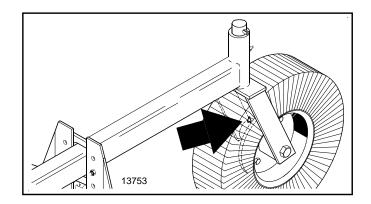


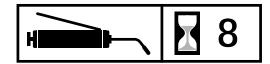






Type of Lubrication: Grease Quantity = 6 pumps



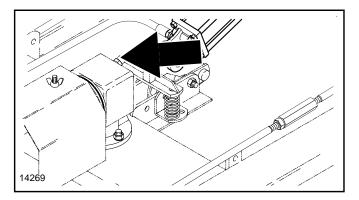


### Tailwheel Hub

The tailwheel hub is equipped with a relief hole located directly opposite the grease fitting. The relief hole releases pressure from inside the hub casting when it is greased. The hub should be greased until grease purges from the relief hole.

Type of Lubrication: Multipurpose Grease

Quantity = Until grease purges from the relief hole





### Gearbox

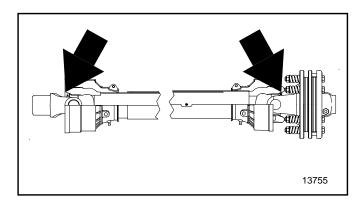
Check oil level in the gearbox by removing the side plug in the gearbox case. If the oil level is low, remove the top plug in the gearbox case and fill with EP90 oil until oil flows from the side port of gearbox case. Reinstall plugs and tighten.

NOTE: Do not overfill! Cutter should be level when checking oil.

Type of Lubrication: EP90 Oil

Quantity = fill until oil flows from the side port of gearbox case.

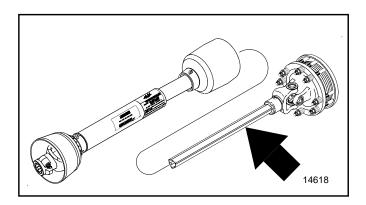
Section 4 Maintenance and Lubrication





### **Driveline U-Joints**

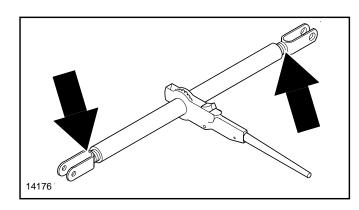
Type of Lubrication: Grease Quantity = 6 pumps





### Driveline

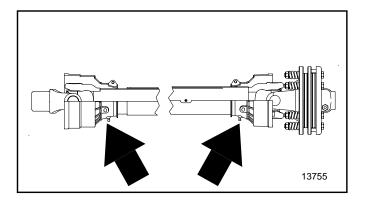
Quantity = Clean & coat the inner tube of the driveline with a light film of grease and then reassemble.

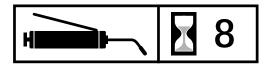




## **Ratchet Jack**

Type of Lubrication: Multi-Purpose Quantity = As required





### Inner Tube Bearing

Type of Lubrication: Grease Quantity = As required

## Section 5 Specifications and Capacities

RCR2584 Rotary Cutter					
	RCR2584				
Cutting Width	84"				
Overall Width	90 3/4"				
Cutting Height	2" - 12"				
Overall Length (Including Tailwheel)	Lift-Type - Single Tailwheel 133" Lift-Type - Dual Tailwheel 116" Trail-Type 158"				
Weight	Lift-Type - Single Tailwheel 1360# Lift-Type - Dual Tailwheel 1480# Trail-Type - 1640#				
Blade Tip Speed	540 RPM PTO: 14,370 FPM / 163 MPH				
Gearbox	540 RPM PTO Driven Beveled Gears Cast Iron Housing 90 HP				
Output Shaft Diameter	2"				
Recommended Tractor PTO HP	Lift-Type - 60 minimum Trail-Type - 30 minimum				
Hitch	Lift-Type - Category II Standard & Category III Adaptable Trail-Type - Self Leveling				
Deck Material Thickness	10 gauge				
Side Skirt Thickness	1/4"				
Deck Height (Bottom of Deck to Bottom of Skid Shoe)	10"				
Blades (2)	1/2" x 4" Heat Treated Alloy Steel Free-Swinging Suction Blades				
Blade Holders	Oval Pan 3/16" x 21"				
Drive Shaft	ASAE Category 4				
Slip Protection	4 Plate Slip Clutch				
Tailwheel	Lift-Type - 4.00 x 8 x 15 1/4 Laminated Tires Trail-Type - 6.00 x 9 x 21 Laminated or 5 x 15 Rim or 6.00 x 9 x 21 Solid Tire				
Replaceable Skids	Standard				
Spring Shock	Standard with Ratchet Jack or Hydraulic option				

### Section 6 Troubleshooting

Problem	Cause	Solution				
Oil seal leaking	Gearbox overfilled	Drain to side plug hole.				
	Seals damaged	Replace seals				
	Grass or wire wrapped on shaft in seal area	check seal areas daily				
Driveline yoke or cross failing	Shock load	Avoid hitting solid objects				
	Needs lubrication	Lubricate every 8 hours.				
Driveline clutch slipping	Scalping the ground	Raise cutting height				
	Cutting too fast	Reduce travel speed				
	PTO being engaged too fast at high engine rpm	Slowly engage PTO at low engine rpm				
	Cutting over solid objects	Avoid solid objects				
Bent Driveline (NOTE: driveline should	Contacting frame	Reduce lift height in transport position				
be repaired or replaced if bent)	Contacting drawbar	Reposition drawbar				
	Bottoming out	Shorten driveline				
Driveline telescoping tube failing	Shock load	Avoid hitting solid objects				
Driveline telescoping tube wearing	Needs lubrication	Lubricate every 50 hours				
Blades wearing excessively	Cutting on sandy ground	Raise cutting height				
	Contacting ground frequently	Raise cutting height				
Blades breaking	Hitting solid objects	Avoid hitting solid objects				
	Blades hitting each other	Blade carriers need to be timed				
Blades coming loose	Blades not tightened properly	Tighten blade hardware (refer to "Servicing Cutter Blades" on page 20.				
	Improper deck attitude	Lower front of deck, see page 14.				
Blade carrier becomes loose	Running loose in the past	Replace gearbox output shaft and blade carrier				
	Blade carrier hardware not tight enough	Tighten to specified torque				
Blade bolt holes worn	Blade hardware running loose	Replace blades and blade bolts if worn				
Blade carrier bent	Hitting solid objects	Avoid hitting solid objects and replace blade carrier				
Excessive side skid wear	Cutting height not level	Adjust cutter height				
	Soil abrasive	Adjust cutter height				
	Cutting too low	Adjust cutter height				
Tail wheel support failing	Lowering too fast	Adjust rate of drop				
	Hitting objects when turning	Reduce speed on turns				

**Excessive vibration** 

Cause	Solution
Driveline bent	Replace driveline
Blades loose	Tighten blade bolts
Blade carrier bent	Replace blade carrier
Blade broken	Replace blade
Blade will not swing	Remove and inspect blade
Blades have unequal weight	Replace both blades

		ioiq											
	Bolt Head Identification							Bolt Head Identification					
Bolt Size (Inches)	Grad	de 2	Grad	de 5	Gra	J de 8	Bolt Size (Metric)	Class		Class	<b>.8</b>	Class	
in-tpi <sup>1</sup>	N ⋅ m <sup>2</sup>	ft-lb <sup>3</sup>	N∙m	ft-lb	N∙m	ft-lb	mm x pitch <sup>4</sup>	N∙m	ft-lb	N∙m	ft-lb	N∙m	ft-lb
1/4" - 20	7.4	5.6	11	8	16	12	M 5 X 0.8	4	3	6	5	9	7
1/4" - 28	8.5	6	13	10	18	14	M 6 X 1	7	5	11	8	15	11
5/16 - 18	15	11	24	17	33	25	M 8 X 1.25	17	12	26	19	36	27
5/16" - 24	17	13	26	19	37	27	M 8 X 1	18	13	28	21	39	29
3/8" - 16	27	20	42	31	59	44	M10 X 1.5	33	24	52	39	72	53
3/8" - 24	31	22	47	35	67	49	M10 X 0.75	39	29	61	45	85	62
7/16" - 14	43	32	67	49	95	70	M12 X 1.75	58	42	91	67	125	93
7/16" - 20	49	36	75	55	105	78	M12 X 1.5	60	44	95	70	130	97
1/2" - 13	66	49	105	76	145	105	M12 X 1	90	66	105	77	145	105
1/2" - 20	75	55	115	85	165	120	M14 X 2	92	68	145	105	200	150
9/16" - 12	95	70	150	110	210	155	M14 X 1.5	99	73	155	115	215	160
9/16" - 18	105	79	165	120	235	170	M16 X 2	145	105	225	165	315	230
5/8" - 11	130	97	205	150	285	210	M16 X 1.5	155	115	240	180	335	245
5/8" - 18	150	110	230	170	325	240	M18 X 2.5	195	145	310	230	405	300
3/4" - 10	235	170	360	265	510	375	M18 X 1.5	220	165	350	260	485	355
3/4" - 16	260	190	405	295	570	420	M20 X 2.5	280	205	440	325	610	450
7/8" - 9	225	165	585	430	820	605	M20 X 1.5	310	230	650	480	900	665
7/8" - 14	250	185	640	475	905	670	M24 X 3	480	355	760	560	1050	780
1" - 8	340	250	875	645	1230	910	M24 X 2	525	390	830	610	1150	845
1" - 12	370	275	955	705	1350	995	M30 X 3.5	960	705	1510	1120	2100	1550
1-1/8" - 7	480	355	1080	795	1750	1290	M30 X 2	1060	785	1680	1240	2320	1710
1 1/8" - 12	540	395	1210	890	1960	1440	M36 X 3.5	1730	1270	2650	1950	3660	2700
1 1/4" - 7	680	500	1520	1120	2460	1820	M36 X 2	1880	1380	2960	2190	4100	3220
1 1/4" - 12	750	555	1680	1240	2730	2010		-		-		-	
1 3/8" - 6	890	655	1990	1470	3230	2380	<sup>1</sup> in-tpi = nominal	l thread di	a.in inch	es-thread	s per incł	า	
1 3/8" - 12	1010	745	2270	1670	3680	2710	$^{2}$ N·m = newton-meters						
1 1/2" - 6	1180	870	2640	1950	4290	3160	3  ft-lb=  foot pounds						

## **Torque Values Chart for Common Bolt Sizes**

<sup>4</sup> mm x pitch = nominal thread dia. in millimeters x thread pitch

1 1/2" - 12

1330

980

2970

4820

3560

2190

Notes

Section 7 Appendix

## Warranty

Land Pride warrants to the original purchaser that this Land Pride product will be free from defects in material and workmanship beginning on the date of purchase by the end user according to the following schedule when used as intended and under normal service and conditions for personal use.

Overall Unit and Drivelines: One year Parts and Labor Gearbox:

(S/N 381566+)	Five years on housing, gears, and shaft.
	Three years on seals and bearings.
(S/N 381565-)	One year on housing, gears, and shaft.
	Seals and bearings considered wear items.

Hydraulic Cylinder: One year Parts and Labor

Hoses and seals considered wear items

Blades, Tires, and Driveline Friction Discs: Considered wear items.

This Warranty is limited to the replacement of any defective part by Land Pride and the installation by the dealer of any such replacement part, and does not cover common wear items such as blades, belts, tines, etc. Land Pride reserves the right to inspect any equipment or parts which are claimed to have been defective in material or workmanship.

This Warranty does not apply to any part or product which in Land Pride's judgment shall have been misused or damaged by accident or lack of normal maintenance or care, or which has been repaired or altered in a way which adversely affects its performance or reliability, or which has been used for a purpose for which the product is not designed. Misuse also specifically includes failure to properly maintain oil levels, grease points, and driveline shafts.

Claims under this Warranty must be made to the dealer which originally sold the product and all warranty adjustments must be made through such dealer. Land Pride reserves the right to make changes in materials or design of the product at any time without notice.

This Warranty shall not be interpreted to render Land Pride liable for damages of any kind, direct, consequential, or contingent to property. Furthermore, Land Pride shall not be liable for damages resulting from any cause beyond its reasonable control. This Warranty does not extend to loss of crops, any expense or loss for labor, supplies, rental machinery or for any other reason.

No other warranty of any kind whatsoever, express or implied, is made with respect to this sale; and all implied warranties of merchantability and fitness for a particular purpose which exceed the obligations set forth in this written warranty are hereby disclaimed and excluded from this sale.

This Warranty is not valid unless registered with Land Pride within 30 days from the date of purchase by the end user.



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